

## CLAIM

1. A dual-coil electromagnetic valve actuator having a permanent magnet and an actuator member (11) movable between two extreme positions under the effect of a
- 5      resilient member and two electromagnets each comprising a core having a T-shaped first core portion (18) with a base (19) connected to a central branch (20) with a coil (21) disposed thereabout, the first core portion (18) being placed in a U-shaped second core portion (22)
- 10     having a base (23) connected to outer branches (24) which extend parallel to the central branch (20) of the first core portion (18), a permanent magnet (25) being interposed between the base of the first core portion (18) and the base of the second core portion (22), the
- 15     actuator being characterized in that, in at least one of the electromagnets, the base (19) of the T-shaped first core portion (18) extends so as to co-operate with the outer branches (24) of the U-shaped second core portion (22) to present airgaps (e) of size much smaller than a
- 20     distance between the base (19) of the T-shaped first core portion and the base (23) of the U-shaped second core portion.